

ASSESSMENT OF THE IMPLEMENTATION OF THERAPEUTIC EDUCATION IN PATIENTS WITH CHRONIC DISEASE IN THE CONTEXT OF PERCEIVED SOCIAL SUPPORT

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ABSTRACT

Introduction: Therapeutic education should be an integral element of treatment, especially in chronic disorders, because good disease control and less frequent relapses or exacerbations contribute to improving the quality of life, including increasing the patient's mental comfort and self-determination in the disease. An important element of the ability to involve the patient in the process of therapeutic education is social support.

Aim of the study: To understand the relationship between the assessment of the effectiveness of therapeutic education in patients treated for chronic diseases and the level of experienced social support.

Material and methods: The study included 98 patients. The study involved the diagnostic survey method. To collect the data, the author's questionnaire and a standardised tool (ISSB) were used. The obtained data were analysed statistically.

Results: Among the patients suffering from chronic diseases, therapeutic education was most often carried out once (42.6%), without a previously prepared educational program (61.4%) and mainly providing methods (46.5%). The surveyed most often participated in educational activities carried out by a single member of the therapeutic team (69.3%), and the duration of education was adjusted to individual needs. The evaluation of the program was carried out only in a minority of those surveyed (43.7%).

Conclusions: Patients with chronic diseases had the opportunity to participate in one-time education. Therapeutic education in clinical practice is far from the recommendations of theoreticians and requires work on each stage of educational activities.

Key words: social support, education, chronic disease.

INTRODUCTION

The issue of therapeutic education is widely described in the available literature on the subject matter. It emphasises, especially with reference to chronic diseases, its main task, i.e. striving for facilitating the functioning of chronically ill people so that it would be close to "normal" and preventing complications connected with the disease [1]. Most authors point to the need to teach patients to understand the disease and learn to live with it, on the basis of their own resources, which is supposed to be conducive to life satisfaction despite the experienced limitations. Equally strongly emphasised is the need to strive for the maximum physical and psychosocial abilities. Patients treated for chronic diseases

should be equipped with knowledge and skills, and in particular, efforts are made to ensure that they perform specific tasks as part of self-care, self-control, and self-observation. What is equally important, they should shape an attitude that is conducive to exercising control over the disease, and consequently they will be able to maintain a good mental condition and a high quality of life [1]. The above presented theoretical assumptions concerning therapeutic education are extremely difficult to implement also in the eyes of the practitioners. The main difficulties result from the ability of the participants of education to get involved in the whole process and the low effectiveness of the programs implemented [2]. The education of chronically ill people is a much more difficult process because it very often requires introducing changes

in health behaviours and maintaining them for the rest of their lives, which often exceeds human mental abilities and, in the absence of social support, is often the reason for abandoning their use [3]. The currently promoted concept of holism in therapeutic education is an attempt to notice various deficits of people participating in education and to eliminate those factors that negatively affect the sense of freedom or the ability to make informed choices. Holistically oriented approaches emphasise the importance of the individual needs and aspirations of the educated people, provided that they do not negatively affect other people. Moreover, they are supposed to eliminate negative self-esteem, lack of decision-making skills, the sense of helplessness, low social support, or lack of knowledge or skills [4]. Therefore, there is a slow process of perceiving the recipients of education as partners and people with specific expectations and the scope of individual experiences, which are their basic point of reference. Therapeutic education understood in this way is therefore supposed to build new patterns of social relations focused on the patients' expectations. The basic changes concern the perception of the role of the educator not as an expert but as a supporting person, showing the benefits of introducing changes in lifestyle while avoiding fear-based techniques, stimulating patients to express their own opinions, to use reflective thinking or to solve problems on their own.

A new asset in therapeutic education is also striving to use various didactic methods, forms, and measures, especially activating ones, and to create patterns of health behaviour [1]. Deepening the issue of therapeutic education, it is worth mentioning that, in modern therapeutic education, attention is paid to improving qualifications, especially practical ones, and educating not only the patients but also their families. According to the WHO, education in chronic diseases should be implemented in all chronic diseases so as to enhance the effectiveness of treatment, and its efficiency should be assessed both in clinical and outpatient practice. With reference to systemic activities, it is necessary to establish therapeutic education as one of the functions of performing a medical profession, include it in the scope of reimbursed services, promote studies on therapeutic education, and implement training programs in order to provide high-quality educational activities [5].

Social support is recognised as a factor that may be helpful in the process of recovery or stabilisation of health. The lack or low sense of social support is connected with some chronic diseases, both of somatic and mental in nature (e.g. coronary artery disease, depression). Social support, as a network of social contacts together with the existing bonds, a sense of belonging, or the functions performed, is conducive to the expression and release of feelings,

reduces the level of emotional tension, and facilitates finding a rational solution in a difficult situation, e.g. connected with health. On the other hand, the excess of experienced support may lead to lowered self-esteem, and a feeling of excessive control or limitation; therefore, it is extremely important to adjust the support provided to the patient to the situation, context, or the expectations and personality traits of the patient. Numerous studies on social support indicate that the type of disorder and the patient's premorbid personality have both positive and negative significance for perceiving oneself in a new role resulting from the limitations of the disease. Also, the type of support and the readiness to use various forms of help show that there are relationships with reference to personality traits and preferred styles of coping with the disease, as well as the gender and age of the study participants. Therefore, it can be concluded that the scope and nature of the support is an individual matter, which is important for the broadly understood process of treatment [3].

AIM OF THE STUDY

The aim of the study was to get to know the relationship between the assessment of the effectiveness of therapeutic education in patients treated for chronic diseases and the level of the experienced social support.

MATERIAL AND METHODS

The study used the method of a diagnostic survey, the questionnaire technique, and the ISSB Social Support Questionnaire. The author's questionnaire consisted of 28 questions about chronic disease, participation in education, and educational expectations. The ISSB consists of 49 statements included in 4 scales, each of which evaluates a different type of support (instrumental, informative, emotional, evaluative). The study was carried out from November 2017 to November 2018 among 101 patients diagnosed with a chronic disease, treated at the University Hospital in the 2nd Department of Internal Diseases in pulmonology departments and at Kraków Swoszowice Health Resort, with the consent of the management of both units. The study was conducted in accordance with the Declaration of Helsinki. Statistical analysis was carried out using the PQStat package version 1.6.4.122. The probability of the test at $p < 0.05$ was assumed as significant, and the probability of the test at $p < 0.01$ was assumed as highly significant. The relationships between variables were determined by the χ^2 test.

Sixty-eight women (69.4%) and 30 men (30.6%) took part in the study. The study was conducted among people aged 21 to 89 years. The mean age

was 53.2 years. The study group was dominated by people with secondary education – 43.9%; there were slightly fewer people with higher education – 31.6%. Vocational education was declared by 18.4% of the surveyed, and elementary only by 6.1%. The vast majority of the surveyed, i.e. 63.4%, were married. Less than 1/5 of the surveyed (16.8%) were widowers/widows. Single surveyed constituted a low percentage – 6.9%, and people in informal relationships – 5.9% (Table 1).

The surveyed, when asked about the chronic disease diagnosed in them, requiring constant treatment and control, most often indicated asthma (33.7%) and hypertension (31.7%). The surveyed also declared the occurrence of several comorbidities; most often they were civilisation diseases related with each other.

The study participants were asked about the duration of their disease. The period of disease up to a year was indicated by 7.9% of the surveyed. The most numerous group (40.6%) were the surveyed who had been suffering from a chronic disease for over 10 years. 19.8% of the surveyed indicated a period between 5 and 10 years. A quite numerous group was made up of people treated for 2-5 years (17.8%) and people treated for more than 2 years (12.9%).

When it came to the question about participation in education from the moment of diagnosing the disease, the vast majority of the surveyed answered that they participated in it during the first hospitalisation at the time of diagnosis (42.6%). A relatively small group (16.8%) was educated on a one-off basis due to hospitalisation at the moment of deterioration of their health. 10.9% of the surveyed indicated several sessions of therapeutic education, and it was connected with several hospital stays. A small percentage of the study participants (5.9%) declared participation in education that took place first in the hospital ward when the disease was diagnosed, and then continued in the clinic. Numerous scattered responses were also obtained, the value of which did not exceed 2%. This group included responses indicating cyclical therapeutic education once a week as well as taking part in 3 educational sessions. The obtained remaining responses, not exceeding 1%, constitute a combination of responses that indicate that the surveyed had a chance to participate in further education after diagnosis in the event of exacerbations and subsequent hospital stays.

When asked about people conducting the education, the surveyed group indicated mainly a nurse (58.4%), a dietitian (10.9%), and a doctor (8.9%). There were situations when the surveyed took part in education conducted by a doctor and a nurse (5.9%), as well as a doctor and psychologist (1%), or a dietitian and a physiotherapist (1%). Almost 14% of the surveyed did not answer this question. Another question concerning therapeutic education was connect-

Table 1. Demographic variables of the respondents

Demographic variables	Number	%
Women	68	69.4
Men	30	30.6
Age (years)		
Under 29	11	11.2
30-44	22	22.4
45-59	38	38.8
Over 60	27	27.6
Education		
Higher	31	31.6
Secondary	43	43.9
Vocational	18	18.4
Elementary	6	6.1
Marital status		
Married	62	63.4
Widowers/widows	17	16.8
Unmarried	13	12.8
No answer	5	5.1
Place of residence		
City over 100,000	24	24.5
City 50,000-100,000	17	17.3
City 10,000-50,000	16	16.3
Town up to 10,000	13	13.3
Village	28	28.6

ed with the methods and forms used. The responses of the surveyed were dominated by the following methods: individual interview (19.8%) and informative lecture (35.6%), as well as demonstration (10.9%) and instruction (5.0%). Activating methods were used extremely rarely; 4.0% participated in the case study method. In some cases, the process of education was based only on the distribution of brochures and leaflets (5.9%). The surveyed also chose combined answers, e.g. lecture, classes, and brochures (2.0%) or an interview, instruction, classes, and brochures (2.0%). In the remaining individual responses, there were various methods used jointly, however, it is worth emphasizing that none of them used activating methods.

Later, the participants of the therapeutic education were asked if the person conducting the education implemented the program on the basis of a specific education program. Only 16.8% of the surveyed confirmed that the education had program assumptions. As many as 61.4% of the educated were not familiarised with any program, and the rest did not answer this question. The next question was to find out who the author of the education program was. The lack of any answer from the vast majority of the surveyed (71.3%) may suggest that they were not familiarised with the

basic information concerning authorship, purpose, or program assumptions. The remaining responses show that 16.8% of the surveyed were trained on the basis of a program created by the employees of the hospital/ward, and in the case of 5.0% of the educated, it was a program prepared by the educator.

The education process should follow a specific pattern. The initial part of the education always includes the diagnosis of the health situation, current treatment, psychosocial situation, and defining knowledge deficits as well as the skills necessary in the disease. The experiences of the surveyed indicate that the educator focused primarily on recognising the health situation and current health problems (24.8%). Nearly 1/5 indicated the analysis of medical records (medical history) and the familiarisation with currently used treatment. Less than 2% of the surveyed were asked about their current psychosocial situation, and less than 4% were asked about the deficit of knowledge and the skills connected with the disease. Nearly 1/10 of the surveyed did not answer this question. The thematic scope of the educational intervention covered mainly the essence of the disease and symptoms (28.7%) and the recommended physical activity (14.9%). Almost 11% of the study participants mentioned raising the subject of diet and the principles of its use, and slightly less (8%) mentioned the subject of medicines taken. A small group of 5% received information about the significance of systematic control.

The surveyed were also asked about the time allocated to therapeutic education. The majority of them described it as “individually adjusted to my needs” (43.6%), nearly 1/3 (29.7%) indicated a one-time education lasting more than 2 hours, and a further 10.9% – educational intervention lasting less than 2 hours. In the group of the education participants, the majority, i.e. 69.3%, were educated by one member of the therapeutic team. Less than 15% declared that the learning process involved other people apart from the educator. From the whole therapeutic team, the cooperation with the educator was undertaken by a doctor (5.0%) and students (2.0%). Single answers also included other patients, a doctor and a nurse, or a dietician. Patients participating in the education perceive the value of cooperation between various team members in conducting therapeutic education. The most numerous group of patients (34.7%) emphasised that therapeutic education in an interdisciplinary team increases the level of support, which allows them to accept the disease, and strengthens adequate motivation and the ability to self-determine in the disease.

The surveyed regarded the education provided by a group of various professionals as valuable in the context of organising information on the diagnosis and treatment of acute and chronic complications, as well as the methods of preventing complications;

such an answer was obtained from 13.9% of the surveyed. Almost 1/10 emphasised that education by various specialists promoted greater motivation to use health care, and especially increasing the frequency of visits, check-ups, or optimal compliance with medical recommendations.

The scope of educational activity should also include informing about psychological support groups, clubs, or associations that can be interesting continuation of inpatient treatment. The conducted study shows that only 15.8% of the surveyed obtained this type of information.

As part of the education, the patients should receive information about health recommendations. Almost half of the study participants (49.5%) obtained information on this subject. A significant percentage (31.7%) did not receive information about further health recommendations. Moreover, 16.8% of the surveyed did not answer this question. In terms of thematic scopes concerning health recommendations, the educator most often raised the issue of the disease itself and its complications (22.8%), dietary recommendations (13.9%), and the need for control at a specialist clinic (17.8%). Less frequently raised topics were, for example, the ones connected with physical activity (4%) or the importance of reducing complications and having check-ups in the clinic (4%).

People using the education were asked to evaluate the factors that hinder the implementation of education. More than 1/5 of the surveyed stated that the obstacle was the lack of time of medical staff to educate patients, and an insufficient number of staff (13.9%), as well as insufficient number of staff prepared for patient education (12.9%). Other important factors also included a short stay of the patient in the ward (7.9%) and a serious condition of the patient (5.0%).

The process of therapeutic education requires the control of knowledge and skills obtained during this process. As many as 61.4% of the educated did not confirm that the educator checked the level of their knowledge, and 58.4% of the assessment of acquired skills. More than 1/3 (43.7%) participated in oral knowledge control, and a further 18% took part in the assessment of skills through classes and instruction. Significant data gaps were revealed in the answers concerning the assessment of the level of knowledge and skills after finishing the education – 7.9% with reference to knowledge and 15.8% with reference to skills.

In the conclusion of the study, the participants were asked to express an opinion on the most important benefits of education in chronic diseases. Over a quarter of people believed that therapeutic education led to a good understanding of the problems connected with the disease and treatment. A significant percentage also indicated increased motivation

Table 2. Relationship between the subject matter of the undertaken therapeutic education and the education of the surveyed

Pharmacotherapy	Education				Total
	Higher	Secondary	Vocational	Elementary	
Yes	4	11	3	4	22
No	27	32	15	2	76
Total	31	43	18	6	98

χ^2 tests, $V = 8.95$, $df\ 3$, $p = 0.03$

Table 3. Relationship between the subject matter of the undertaken therapeutic education and the place of residence of the surveyed

Pharmacotherapy	Place of residence					Total
	City over 100,000	City 50,000-100,000	City 10,000-50,000	Town up to 10,000	Village	
Yes	2	2	6	6	6	22
No	22	15	10	7	22	76
Total	24	17	16	13	28	98

χ^2 tests, $V = 10.16$, $df\ 4$, $p = 0.038$

Table 4. Relationship between the factors hindering implementation of therapeutic education and the place of residence of the surveyed

Hindering factors – lack of time	Place of residence					Total
	City over 100,000	City 50,000-100,000	City 10,000-50,000	Town up to 10,000	Village	
Yes	11	11	13	4	19	58
No	13	6	3	9	9	40
Total	24	17	16	13	28	98

χ^2 tests, $V = 10.43$, $df\ 4$, $p = 0.034$

in maintaining health (12.9%) and increased responsibility for one's own health (17.8%).

Several relationships were confirmed between the education and place of residence of the surveyed and the subject of education, factors hindering education, and the place of residence as well as the time spent on education and the sex of the surveyed (Table 2).

The observed significant differences in undertaking education connected with pharmacotherapy depending on the patient's education; people with elementary education were more often educated in this respect, in contrast to the surveyed with other education.

A relationship was also found between the place of residence and implementation of the subject matter connected with pharmacotherapy. Almost 50% of people from small towns (up to 10,000) confirmed conducting education on pharmacotherapy, while people living in other locations obtained significantly lower results (Table 3).

While analysing the factors hindering the realisation of education, a relationship was found between the place of residence and lack of time of the staff for educating the patients. In big cities (over 100,000) and in small towns (up to 10,000) the surveyed pointed to the occurrence of this factor, while the surveyed

Table 5. Relationship between the time spent on implementation of therapeutic education and the sex of the surveyed

Time of implementation of education	Sex		Total
	Men	Women	
Other	4	1	5
Individually, appropriate to the needs	12	30	42
One time over 2 hours	0	4	4
One time 2 hours	7	23	30
Every day about 15 min	6	5	11
No answer	1	5	6
Total	30	68	98

χ^2 tests, $V = 11.61$, $df\ 5$, $p = 0.041$

living in other localisations did not observe such a hindrance (Table 4).

A relationship was confirmed between the time spent on education and the sex of the surveyed. Men, more often than women, declared participation in the education that was more systematic but shorter (every day about 15 min). Women, in turn, pointed to implementation of one-off education session lasting to hours as well as individually, more appropriately to their needs (Table 5).

Table 6. Indicators of social support in the surveyed

Type of support	M	Min.	Max.	SD
Emotional support	31.10	8	45	9.690
Information support	46.79	10	60	11.836
Instrumental support	52.64	3	65	11.010
Evaluating support	17.74	4	25	5.665

M – average indicators of social support, SD – standard deviation

The scope of the perceived support was analysed with reference to the selected sociodemographic variables.

There was an analysis of the relationship between the indicators of particular types of support and sociodemographic variables.

The data concerning the results of the indicators of social support of people, together with mean, minimum, and maximum values, as well as standard deviation values are presented in Table 6.

The mean indicator of emotional support in the surveyed was 31.10, and of information support it was 46.79. In terms of instrumental support, the maximum mean was 52.64, and of evaluating one it was 17.74. Therefore, it can be concluded that the surveyed experienced, above all, instrumental support, while to a much lesser extent they experienced evaluating support, building a good image of one's own and human values in a social relation. Differences were observed with reference to the sex, age, marital status, or the place of residence and the evaluation of emotional support. Higher values were obtained by men, people from the middle-age group, the surveyed who were married and with vocational education, as well as the study participants living in cities with over 50,000 inhabitants. A relationship was found between the education and marital status and the evaluation of emotional support:

- the surveyed who had a bachelor's degree, in comparison with the remaining subgroups, rated the level of emotional support the highest;
- divorced people obtained the lowest values in terms of emotional support.

The obtained results in terms of the assessment of support in the process of therapeutic education should be treated as preliminary; so far, the level of social support in chronic diseases in the context of education has not been the subject of studies, and there is a need to continue them.

DISCUSSION

Contemporary therapeutic education is facing significant challenges connected with the changing role of the patient in the therapeutic process and the need to conduct educational activities focused on increasing awareness and responsibility for the health

of the individual and community. Education for adults turns out to be a difficult area of activity, especially when carried out according to the patterns that were adopted as the standard many years ago. There are many arguments for introducing further changes in education programs for adults. From the point of view of the observer of the therapeutic education process as well as its participant, it can be noticed that despite the obvious benefits in favour of implementing more modern methods, means, and ways of understanding the essence of educational activities, in practice they seem to be barely noticed or even denied [1, 2].

Arguments indicated as important can be divided into 3 groups. The first, most obvious and beneficial one for the health care system, is the economic aspect. Good control of the disease, fewer relapses, fewer hospitalisations, reduction of medicine doses, lower costs of check-ups, or reduction of treatment costs should be important arguments when distributing funds in the health sector.

The second argument, very important from the patient's point of view, is psychological. Therapeutic education in its new version may be conducive to the sense of security in the disease and reduction of ailments, and thus improve the patient's mood, reduce the level of anxiety, increase the sense of comfort, and moreover the patient may regain the belief that they have an impact on their health and reduction of symptoms.

Another important consequence is strengthening health-sustaining resources and the development of deficit areas (e.g. social competences). Learning to think about health (as one of the most important resources) and what can be done to strengthen, rebuild, and improve it in a specific area is significant for improving the quality of life. The third group of arguments is connected with the issues of social functioning. High-quality and innovative education gives tools and shapes the ability to search for various forms of help, select specialists with the highest competence, access current knowledge of interdisciplinary nature, and choose the best medical offers for a given person. Moreover, in the social dimension, there is an increase in awareness of health and in compensating for deficits [2, 3].

The obtained research results show that, unfortunately, therapeutic education does not meet the basic

requirements in practice. The method of its preparation, conduct, or evaluation clearly illustrates the scope of deficits. At the same time, one can notice in the statements of the surveyed a significant need for this form of activities, especially those that would be implemented in an interdisciplinary team [4].

The conducted study is an introduction to the search for the relationship between the importance of social support and involvement in the process of education. The chronically ill surveyed emphasised the importance of instrumental support, which enables a better organisation of everyday life in the experienced disease. However, the relationship between the received support and the reference to the assessment of therapeutic education was not confirmed.

Many studies have found that social support has a positive effect on the treatment process and coping with the disease in various types of disorders, and its lack may even be a predictor of premature death [5]. For example, socially isolated cardiac surgery patients are twice as likely to die in the 3 years following a myocardial infarction [6]. One study also found that the mortality rate (over 10 years) in people diagnosed with coronary heart disease was 3 times lower in socially well-integrated surveyed [7]. Case *et al.* drew attention to the importance of social support in reducing mortality after a myocardial infarction in people who have a spouse or other close person [8]. Similar conclusions were reached by Williams *et al.* [9]. Research on social support in the context of readiness to use help in people after myocardial infarction shows that patients with the type A behavioural pattern are focused on individual coping with the disease; therefore, they do not seek external support or use the help offered to them [10]. Researchers also point to the importance of post-hospital sanatorium rehabilitation, providing the patient with instrumental, informational, and emotional support [11].

In turn, in patients diagnosed with asthma, there are differences in the expectation of support between men and women. Men use institutional help more willingly, while women use the support of family and friends.

Interesting observations concerning the relationship between social support and coping with chronic disease were made by Kurowska and Frąckowiak. In their conclusions, the authors stated that the preferred style of coping with a chronic disease does not affect the amount of support received by the surveyed. On average, the highest instrumental support is given to people who prefer the emotional style of coping with stress, i.e. focused on themselves and their own emotional experiences such as: anger, guilt, and tension, while the lowest support is given to the surveyed displaying the style focused on avoidance [10, 11].

The quoted study results show that social support is an important element contributing to the creation of proper conditions for effective therapy. It should also be noted that the scope and nature of support is an individual matter, connected both with personality traits and sociodemographic aspects. Therefore, taking into account all the discussed aspects of support may allow for the implementation of comprehensive therapeutic education.

The results of the conducted research indicate the need to continue work on the meaning of therapeutic education. The limitations of the research carried out are the small group of respondents and the inability to continue further research in the same group. No less important would be the use of additional standardised tools to assess the effectiveness of therapeutic education.

CONCLUSIONS

The conducted study shows the following:

1. The surveyed taking part in therapeutic education declared the value of the educational activities conducted, but the scope of the education they received did not exceed the basic level.
2. With regard to the experienced support, the participants of the study only indicated the area of instrumental support.
3. The surveyed expect the implementation of therapeutic education by a group of specialists, which in their opinion increases the level of support and allows them to accept the disease and the ability of self-determination.
4. The surveyed considered the following as the main factors hindering the implementation of the therapeutic education process: lack of time at work of individual professionals, a small number of staff, and shortages of staff in the profession of educator.
5. The most important benefits of therapeutic education consist of increasing responsibility for one's own health and increasing the level of motivation to maintain it.

Disclosure

The authors declare no conflict of interest.

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